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ABSTRACT

Two conflicting hypotheses are a) that students' ratings of teachers correlate with the students' achievement and b) that they do not. The latter hypothesis is difficult to test under ordinary classroom conditions because of differences in subjects taught and other factors. This defect in design was remedied by randomly assigning 12 English teachers and 12 social studies teachers to classes to which 20 students had been randomly assigned. Each teacher taught the same 2-week course in his own subject area. Students' achievement was measured at the end of the course; all students rated their teachers. A modest relation was found between achievement and ratings in both English and social studies classes. A strong relation between aptitude and achievement is associated with a weak one between achievement and rating. (Author/JA)

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# The Relation of Student Achievement and Student Ratings of Teachers

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Some people expect a high positive correlation between achievement and the student's rating of a teacher because they think that the student's success in the class mediates his evaluation of the teacher. Others predict no relation because they expect the two factors to be influenced by uncorrelated factors--achievement by aptitude and motivation, evaluation of the teacher by such factors as similarities of the personalities of teacher and students and similarities of values, preferences and background.

A direct test of this hypothesis is difficult to make when ordinary classrooms are used. Teachers are teaching different subjects to students assigned to their classes in a variety of ways. We have, however, devised a teaching condition which makes a direct test of the hypothesis that there is a relation possible across teachers.

## Methodology

Specially prepared short courses were used as the vehicle for studying these relations. 170 high school students were randomly assigned to English classes, equally from males and females. Similarly, 157 students were randomly assigned to Social Studies classes.

12 first year English teacher trainees were randomly assigned to these classes; similarly, 12 first year Social Studies teachers were also randomly assigned to classes. Thus, students were randomly assigned to classes and teachers to classes.

Both the English and the Social Studies teachers taught these specially prepared courses, one covering topics similar to those found in the English curriculum, and the other, covering topics similar to those found in a Social Studies curriculum. All teachers received special training on the content to be taught, and special training on relevant skills to be used in teaching these courses. The course content was developed by experienced high school teachers. The material given to the trainees stated the objectives to be attained, the topics to be covered, and substantive material on these topics. The developers of the course also prepared an achievement test measuring attainment of the objectives which was given at the end of the course.

The classes met every day for one hour for a period of two weeks. Each class had approximately twenty students in it. A clinical supervisor was present in the class who ensured appropriate control of students' classroom behavior.

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The students had earlier taken an aptitude test. Each took a 45 minute achievement test on the last day of the two week course. On the immediately preceding day they filled out a thirty-four item rating scale. This scale contained items asking if the teacher was one the student would like to have as their regular teacher, if the teacher interested the students in the material being taught, if the teacher encouraged participation in the class, and similar items. Subsequent analysis of these ratings and others obtained on other samples indicate that the scale measures a general favorability factor or "good impression" factor.

## Analysis and Results

Zero order correlations were run between ratings, achievement scores and aptitude scores. The analyses were performed separately for English and Social Studies classes. Separate analyses were run for each class. Partial correlations were computed for the relation between achievement and rating, holding aptitude constant.

Table 1 presents the correlations. As is apparent in that table, there is a positive and significant correlation between achievement and rating for English classes. When the effect of aptitude is partialled out, the correlation between ratings and achievement is significant for both English and Social Studies classes; the correlation, however, are relatively modest.

## Conclusion

Even under these controlled teaching conditions the support for a relationship between achievement of students and ratings of teacher is mixed. Where evidence for a relation is found, that evidence is not strong; the absolute magnitude of the correlation is not large. Further, this relation occurs when there is also a relatively low relation between aptitude and achievement. A reasonable conclusion seems to be: the stronger the relation between aptitude and achievement, the less the relation between achievement and rating. What factors are influencing the rating under the latter conditions are not presently known.

Table 1

Intercorrelations among Student Ratings, Achievement, and Aptitude[1]

| | x rating | $r_{12}$ | $r_{13}$ | $r_{23}$ | $r_{12.3}$ |
|---|---|---|---|---|---|
| Social Studies (N = 129) | 16 | .158 | -.03 | .695** | .251* |
| English (N = 125) | 19 | .323** | .165 | .553** | .278** |

** 2 tailed test; $p \leq .01$ for $r \geq .25$
1 1-rating; 2-achievement; 3-aptitude
2 Mean rating; scale is from 0-34
* 2 tailed test; $p \leq .05$ for $r \geq .19$